CONNECTING CAPABILITIES
HealthTec Cluster Vision
Increasing cross-sector connectivity to support cutting-edge research & development, commercialisation and global growth of health technology solutions that empower citizen health and wellbeing.
Foreword

Few industrial sectors rely on collaboration to the extent of health technology. We are an engineering based industry, addressing challenges identified in clinical settings, and delivering solutions that improve people’s lives. Often those solutions require a sea change in how to develop, assess and deploy new generations of technology. Sixty years ago that could have been the use of electrical stimulation, today it might be new diagnostic, robotic or digital applications. A collaborative approach to overcoming these challenges provides a significant opportunity to improve the health and wealth of our country. The proximity of our research capability to the largest single payer health system in the world is the one truly unique advantage the UK has over its global competitors.

Peter Ellingworth
Chief Executive Officer, Association of British HealthTech Industries (ABHI)

The reach into the local NHS provided by the Innovation Agency is particularly important in that regard. I am delighted to support the launch of the HealthTec cluster here in Daresbury, and the extended opportunity it provides for our sector alongside its sister facility at Harwell.

HealthTec Cluster

Clusters promote economic growth through the co-location of organisations, knowledge, skills and facilities. This environment promotes connection and collaboration - enabling those in the cluster to operate more flexibly and productively.

The lead organisations in the development of this HealthTec cluster are the Science and Technology Facilities Council (STFC) and the North West Coast Academic Health Science Network (AHSN) - The Innovation Agency.

Clusters by their very nature are supported by strong nuclei-centres of focus that promote the spark of innovation. They are intentionally outward-looking and open to regional, national and international partnerships that serve the innovation agenda. Within the National Research and Innovation Campuses at Harwell and Daresbury (see page 9), clusters are a key ingredient to the wider ecosystem development.

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Clusters create a fertile environment for the commercialisation of innovative ideas through easy access to collaborators and cutting edge technologies. At Daresbury’s sister campus, Harwell in Oxfordshire, our Space, HealthTec and EnergyTec clusters have been instrumental to driving innovation and growth within the sectors they represent but also in fostering a multidisciplinary ethos across sectors. With the launch of the new HealthTec cluster in the North West of England, we look forward to progressing this journey with a growing and vibrant stakeholder community.

Dr Barbara Ghinelli
Cluster Development Director, Science and Technology Facilities Council
Health Technology in the North West

The UK is globally recognised as a leader in health technology research and innovation. Health technology encompasses a number of disciplines across life sciences from medical technologies and digital applications, to pharmaceuticals and biomedical technologies. In the North of England there are over 28 universities fuelling research, education and skills development and >1200 life science companies employing more than 50,000 people*. The HealthTec cluster provides an opportunity to bring these hubs of expertise from across industry, academia, public sector, investor networks and entrepreneurs together to share ideas and collaborate to stimulate innovation and tackle global challenges.

The HealthTec Cluster spans four local enterprise partnerships in the North West; Cheshire and Warrington, Greater Manchester, Lancashire and Liverpool City Region. These regions come together to share knowledge and facilities specifically designed to develop health technology businesses and to transform healthcare.

*Northern figures were provided by Bionow, April 2019.
Cheshire and Warrington has a well-developed health tech ecosystem offering research partnerships, internationally significant research facilities and is home to the UK’s largest bioscience campus. (Pg. 24)

As the only city region in the country with control of its combined health and social care budgets, Greater Manchester is able to take a system-wide view of the region’s most pressing health needs. (Pg. 30)

Lancashire Enterprise Partnership works closely with the three Universities in Lancashire which form the core of the health Innovation eco-system alongside the Academic Health Science Network and local health Trusts. (Pg. 32)

Health and Life Sciences is a key sector for Liverpool City Region, with the LEP, Local Authorities, the Combined Authority, companies, NHS and universities making significant investments and supporting wider developments over recent years. (Pg. 33)

The UKRI-STFC National Research and Innovation Campuses at Daresbury and Harwell, provide a vibrant research and development-intensive ecosystem where industry, academia and public organisations are co-located with cutting-edge facilities.

Sci-Tech Daresbury
Sci-Tech Daresbury is a world-class science and technology campus in the heart of the North West. Through the co-location of more than 50 years’ heritage in world-changing science with high-tech, ambitious and fast growing businesses, Sci-Tech Daresbury is a dynamic and economically transformative campus.

Sci-Tech Daresbury is a base for nearly 150 innovative and collaborative technology companies from start-ups to large corporates such as IBM and Hitachi, across sectors including biomedical and healthcare and digital/ICT. These businesses benefit from a highly collaborative environment where contacts, advice and technology ideas are shared.

Research and innovation assets include:

- The Hartree Centre, supporting UK industry in the effective adoption of advanced digital technologies
- The Virtual Engineering Centre, a leading centre for the exploitation of innovative digital engineering solutions
- The Cockcroft Institute, a national centre of excellence in particle accelerator science
- SuperSTEM, one of the world’s most powerful scanning transmission electron microscope facilities
- Daresbury Laboratory has pushed the boundaries of science since the first day it opened in 1962. Over 50 years on, it is internationally recognised for world leading scientific excellence in a diverse variety of fields, from nuclear physics to supercomputing

As the host of the North West HealthTec Cluster, Sci-Tech Daresbury has 32 organisations and over 340 employees on-site driving health technology innovation in the region.

sci-techdaresbury.com
Harwell Campus

Harwell Campus is built around world leading facilities and capabilities. Located on a 710 acre campus, Harwell is home to over 200 commercial, research and public sector organisations employing over 5,500 skilled people. Activities at Harwell range across many different sectors and disciplines, reflecting the use of the large facilities at its core. Research and innovation assets include:

- The Diamond Light Source
- Central Laser Facility
- Neutron Spallation Source (ISIS)
- Rosalind Franklin Institute
- RAL Space

To encourage collaboration and knowledge exchange, clusters have been formed in Space, HealthTec and EnergyTec, these enable the cross-over of multi-disciplinary innovation. The clusters focus on building relationships between stakeholders and across disciplines, raising the profiles of campus organisations and encouraging exports and inward investment.

harwellcampus.com

Innovation Ecosystems: Connecting campuses

Through active collaboration between the Daresbury and Harwell HealthTec Clusters we are already generating new collaborations that would not otherwise have come about. Multidisciplinary connectivity has been stimulated through campus led Cross-Cluster Industrial Engagement Proof of Concept funding. This has benefited over 50 organisations to date, resulting in 29 new collaborations and 31 projects between organisations and industry, enabling rapid innovation and development.

"The HealthTec Clusters are an incredibly exciting opportunity for the UK. They aim to drive innovation by bringing together the business and research communities, along with access to a unique suite of major scientific facilities. Our clusters are born out of a deep knowledge of the UK economy and what is driving productivity and growth, and we align our own strategy with these.

Professor Mark Thomson
Executive Chair, Science and Technology Facilities Council
**Innovation Ecosystem: Stakeholders**

The HealthTec Cluster is made up of a number of organisations that can support businesses working in health technology through complimentary capabilities and knowledge. The lead organisations, Innovation Agency and UKRI-STFC, both leverage their national connectivity to support and enhance this initiative.

**Academic Health Science Network: Innovation Agency**

Academic Health Science Networks (AHSNs) are described by NHS England’s National Director for Innovation, Ian Dodge, as ‘the innovation arm of the NHS’ and they boost local economies by helping companies do business with health and social care organisations.

The Innovation Agency is the North West Coast AHSN based at Sci-Tech Daresbury with satellite offices in Liverpool Accelerator and Preston Business Centre. They are one of 15 AHSNs working together in a national AHSN Network, funded by NHS commissioners to spread innovations in health and care.

In the last year, 99 companies reported some sort of benefit from working with the Innovation Agency: 25 created a total of 72.5 jobs; seven safeguarded 13 jobs; 31 companies gained a total of £2.5m worth of new contracts; 21 received £5.7m investment or grant funding.

innovationagencyynwc.nhs.uk

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**UK Research and Innovation**

**What we do**

Operating across the whole of the UK with a combined budget of more than £7 billion, UK Research and Innovation (UKRI) aims to be an outstanding organisation that ensures the UK maintains its world leading position in research and innovation by creating a system that maximises the contribution of each of the component parts and creates the best environment for research and innovation to flourish.

We will be measured by the impact we deliver, and this will have three elements:

- We will push the frontiers of human knowledge and understanding
- We will deliver economic impact and social prosperity
- We will create social impact by supporting our society and others to become enriched, healthier, more resilient and sustainable

**Our councils**

UKRI brings together the UK Research Councils, Innovate UK and a new organisation, Research England.

ukri.org

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“There is a wealth of talent and many fantastic facilities in our region; I am confident that by collaborating in a HealthTec Cluster we will create a powerful magnet for more investment and activities which benefit the UK economy – and the health of our population.

Dr Liz Mear

Chief Executive, Innovation Agency
Combining the extraordinary technology strengths of STFC at the Daresbury Campus with the health expertise of the North West Coast Academic Health Sciences Network provides an outstanding setting for the new HealthTec Cluster to develop. By working with the cluster’s many stakeholders, UKRI will enhance capacity to support the development of innovators and industry. This complements the founding objectives of the HealthTec Cluster set up by STFC and its partners at Harwell.

Sir Mark Walport
Chief Executive, UK Research and Innovation
Innovate UK

Innovate UK drives productivity and economic growth by supporting businesses to develop and realise the potential of new ideas. We connect businesses to the partners, customers and investors that can help them turn ideas into commercially successful products and services and business growth. We fund business and research collaborations to accelerate innovation and drive business investment into R&D. Our support is available to businesses across all economic sectors, value chains and UK regions. Innovate UK is part of UK Research and Innovation. innovateuk.ukri.org

Medical Research Council

The Medical Research Council’s (MRC) mission is to improve human health through world-class medical research. To achieve this, we support academic research and development of skills and capabilities across the biomedical spectrum, from fundamental lab-based science to clinical trials, and across disease areas. We aim to ensure that UK bioscience and clinical researchers are well-positioned to swiftly de-risk and advance innovative therapies, diagnostics and interventions towards the clinic and/or commercialisation. Fostering and strengthening collaboration and engagement across academia, business and the NHS is a major strategic priority for MRC, supported through flexible, innovative ways of working and shared access to resources, knowledge and talent. MRC is part of UK Research and Innovation. mrc.ukri.org

Science and Technology Facilities Council

The Science and Technology Facilities Council is at the forefront of UK science and technology. Through our collaboration with industry and long-term investment in research and development, STFC underpins sectors that contribute billions of pounds annually to the UK economy, including space, pharmaceuticals, digital and health technology. STFC supports industry by providing world-class large-scale facilities, highly-skilled people, and a structure of support and investment that allows innovation to flourish. As a trusted and experienced partner, STFC has a long track-record of delivering tailored solutions to industry challenges.

Flexible access to over £2 billion worth of scientific facilities, complementary technologies and IP, provides businesses with the opportunity to work with STFC to transform products and processes, and to increase productivity. Through the co-location of high-tech, high-growth business with STFC’s world-leading research and innovation sites, entrepreneurs, start-ups, SMEs and corporates become part of a collaborative and dynamic ecosystem designed to help businesses succeed. STFC is part of UK Research and Innovation. stfc.ukri.org
Association of British HealthTech Industries

HealthTech plays a key role in supporting delivery of healthcare and is a significant contributor to the UK’s economic growth. HealthTech is now the largest employer in the broader Life Sciences sector, employing 121,000 people in 3,500 companies, with a combined turnover of £22.2bn. The industry has enjoyed growth of around 5% in recent years. ABHI’s 300 members account for approximately 80% of the sector by value.

abhi.org.uk

BioNow

Bionow is an award-winning specialist business development and services company serving the life sciences sector in the North of England. We provide our members with the tools and support to become the most competitive in the industry through our range of specialist products and services.

Supporting your Businesses to Grow.

Bionow’s core mission is to support and be part of a growing Northern Life Sciences and Healthcare community, a mission closely aligned with the goals and values of our sponsor companies and universities.

bionow.co.uk
Catapults

The Catapult network was established by Innovate UK to support innovation and its widespread use by UK businesses. They do this by providing access to expert technical capabilities, equipment and other resources required to take innovation ideas from concept to reality.

catapult.org.uk

Satellite Applications Catapult

The Satellite Applications Catapult is a unique innovation and technology company, which boosts UK productivity by helping organisations harness the power of satellite-based services.

We are changing the way that healthcare and wellbeing services are delivered by working with organisations to use satellite applications to deliver transformational change. We are initially working with the NHS across the UK to demonstrate our ability to diffuse satellite-based innovation at scale before expanding to also focus on export and private healthcare markets. We have a strong partnership with NHS Arden and Greater East Midlands Commissioning Support Unit, and strong links with a range of other NHS organisations across the whole of the UK.

The primary focus is scaled diffusion of remote healthcare solutions. The key use cases are based on managing long term conditions and solutions for improving the efficiency of emergency response; both use cases prioritise early intervention/diagnosis and remote monitoring/consultation, which should reduce service delivery costs and alleviate pressure on hospital and GP services.

We have a strong track record of helping businesses, areas and regions unlock customer demand, open new markets, drive exports, attract investment and create new jobs.

Through our work we aim to support UK industry to capture a 10% share of the predicted £400Bn global space market by 2030.

sa.catapult.org.uk
The Cell and Gene Therapy Catapult was established as an independent centre of excellence to advance the growth of the UK cell and gene therapy industry, by bridging the gap between scientific research and full-scale commercialisation.

With more than 180 experts focusing on cell and gene therapy technologies, it works with partners in academia and industry to ensure these life-changing therapies can be developed for use in health services throughout the world. It offers leading-edge capability, technology and innovation to enable companies to take products into clinical trials and provide clinical, process development, manufacturing, regulatory, health economics and market access expertise. Its aim is to make the UK the most compelling and logical choice for UK and international partners to develop and commercialise these advanced therapies.

ct.catapult.org.uk

“"We wholeheartedly support the setting up of a Northwest HealthTec cluster. We have received support from both KTN and the Innovation Agency in our growth from a start-up at Alder Hey Innovation Hub to now having multiple embedded medical 3D printing facilities in hospitals across the UK.

Henry Pinchbeck
CEO, 3D LifePrints

Medicines Discovery Catapult is a national facility connecting the UK community to accelerate innovative drug discovery. We provide unique scientific capabilities and act as a gateway to UK resources and expertise, supporting UK SMEs to drive the development and industrialisation of new approaches for the discovery of new medicines.

By validating new ways of discovering medicines and driving key talent and expertise across the sector, we will support the UK life sciences industry, SMEs and innovators to deliver growth for the UK economy and maintain the UK's heritage position as a global leader in medicines R&D. Ultimately, new industrialised technologies are vital for delivering new medicines to patients, faster.

md.catapult.org.uk
Cheshire and Warrington has a well-connected health tech ecosystem offering research partnerships, networking opportunities and state of the art facilities, including a £42 million seed and early stage venture capital fund, a national facility for collaborative R&D as well as the UK’s largest bioscience campus, Alderley Park.

This ecosystem is linked by the Cheshire Science Corridor bringing together internationally significant research facilities and businesses enabling collaboration and product innovation.

Key sectors include: advanced scientific analysis and research; pharmaceuticals R&D and manufacturing; chemical engineering; CROs, instrumentations, medical devices.

The area has the highest productivity in the North of England and a talented workforce with 40% of Cheshire & Warrington’s working age population qualified to degree level or above and 6,000 working in the life sciences sector.

Cheshire and Warrington Growth Hub support businesses of all sizes, by helping them to accelerate growth, innovation and skills. We support businesses to access and collaborate with the public and private sectors.

The Growth Hub is part of Cheshire and Warrington Local Enterprise Partnership who set the strategic direction for our sub-region and work closely with partners and government.

candwgrowthhub.co.uk
871candwep.co.uk

Department for International Trade

The Department for International Trade (DIT) is a UK Government Department that helps businesses export, drives inward and outward investment, negotiates market access and trade deals, and champions free trade.

DIT helps businesses to locate and expand in the UK and provides tailored guidance to support the realisation of international business ambitions.

The Department’s Investment Services Team in the Northern Powerhouse region engages with companies, offering a single-point of contact around policy and business issues, connecting investors into a larger network of international business support. DIT’s Northern Powerhouse Investment Hub also has a Life Sciences Specialist to support Foreign Direct Investment into the region.

invest.great.gov.uk

European Space Agency: Business Applications

Space is open for business and has the power to improve the everyday lives for everyone on Earth. European Space Agency (ESA) Business Applications enables and supports companies to apply space data and technology (GPS, Earth Observation data, Satellite Communications, etc) in commercial services.

Of particular interest are applications that promote the use of space to previously ‘untapped’ consumer markets. ESA Business Applications seeks to fund innovative new services developed for these markets, which could provide major benefits (better efficiency, employment, etc) on both the demand and supply sides of the economy.

A network of five Regional Ambassadors are tasked with identifying and supporting businesses across the UK that might benefit from this funding programme, acting as a ‘front door’ and providing guidance during the early stages of application. Your Ambassadors in the north of England are: Alan Cross (NW) & Kavitha Muthu (NE).

business.esa.int
ESA Innovation Partner Network
ESA’s Innovation Partner Network (ESA IPN) finds new applications for technology originally developed for the space sector, such as rockets, robots, and even astronaut suit cooling systems. By identifying industrial challenges and connecting these with the high-tech capabilities of Europe’s space sector, the ESA IPN has successfully supported more than 300 transfers of space technology, systems, and know-how into other sectors.
With representatives in 16 countries across Europe offering fully funded technology scouting, the ESA IPN is the ideal partner to connect you with the right solution for your business.

esa.int/tp

ESA Business Incubation Centre United Kingdom
Space technology can offer ambitious entrepreneurs the opportunity to gain a competitive advantage within their sector. The ESA Business Incubation Centre United Kingdom (ESA BIC UK) is a nationwide programme that equips start-ups and small companies to help accelerate business growth.
Start-ups utilising space technology in any way at all can take part - from robots that weigh chickens using GPS, to insect proteins grown using life support technology from space stations!

esa-bic.org.uk

eHealth Cluster – Liverpool City Region
Liverpool City Region eHealth Cluster is a membership led organisation working across technology, health and social care sectors. Established in 2013 by local SMEs, the cluster has developed to meet the needs of members across our categories of membership:
• Technology SMEs and Individuals
• Public bodies and professionals
• Academic and Research
• Health and Social Care Providers
• Support Functions
• Supply Chain Partners
• Other/Emerging Equipment Providers
The cluster stimulates growth and success of the region by joining up developers, commissioners, suppliers and service providers in a structured, impartial way. Recently we have supported the digitisation of homecare services for Liverpool City Council and are currently managing the implementation of the DCMS funded Liverpool 5G Testbed.
Working with our members we have developed our Adoption Readiness Level® tool, a free self-assessment tool designed to help understand the practical barriers that can be encountered in the adoption of digital solutions in health and social care.

ehealthcluster.org.uk
Grow MedTech

Grow MedTech is a major UK programme providing specialist support for innovation in medical technologies across the Leeds and Sheffield City Regions. Our sector-specialist innovation support is helping to put these regions at the forefront of the UK’s medtech sector.

We provide funding for technologies from initial concepts at Technology Readiness Level (TRL) 2 and 3 through to proof of commercial concept at TRL 5. We also provide support for projects at TRL 5+. More importantly, academics and companies can access sector-specialist expertise and advice to help them progress their technologies, create effective partnerships and leverage additional funding from other sources. We help projects bring together different disciplines and technologies - including digital and AI - to enable our partners to access the strongest market opportunities.

Grow MedTech is a collaboration between the Universities of Bradford, Huddersfield, Leeds Beckett, Sheffield Hallam and York, led by the University of Leeds and funded through the Research England Connecting Capability Fund.

growmed.tech

Health Innovation Manchester

Health Innovation Manchester is an Academic Health Science System driving proven innovation into health and social care services at pace.

Harnessing the region’s exceptional academic and clinical assets, alongside industry know-how, we bring forward a constant flow of innovative research and solutions, accelerating them through the evaluation process and supporting them through our devolved decision-making structures into clinical practice system-wide.

Operating within a devolved health and social care system enables us to create a unique infrastructure and environment for innovators to flourish - with a single gateway and pathway, world-class informatics and processes that enable speedier decision-making and more certain routes to adoption.

healthinnovationmanchester.com
Greater Manchester Combined Authority

Greater Manchester is the only city region in the country with control of its combined health and social care budgets - a sum of more than £6 billion annually. This unique approach enables the city-region to take a system-wide view of the region’s most pressing health needs; joining up the work of all commissioners and providers and capitalising on streamlined governance arrangements to transform the health and wellbeing of its 2.8m citizens. The Greater Manchester Combined Authority’s (GMCA) vision is to make Greater Manchester one of the best places in the world to grow up, get on and grow old. An age-friendly Manchester is one of GMCA’s ten priorities, while health innovation is one of the city-region’s science and innovation strengths as identified in the Greater Manchester and Cheshire East Science and Innovation Audit. GMCA works closely with the Greater Manchester Health and Social Care Partnership, Health Innovation Manchester and Greater Manchester universities to ensure that these priorities result in economic growth for businesses as well as improved public services for local citizens.

greatermanchester-ca.gov.uk

Knowledge Transfer Network

Knowledge Transfer Network (KTN) is Innovate UK’s network partner. We connect people to accelerate innovation. We link new ideas and opportunities with expertise, markets and finance through our network of businesses, universities, funders and investors. From agri-food to autonomous systems and from energy to design, KTN combines deep knowledge in all sectors with the ability to cross boundaries.

KTN’s Health team has expertise across medical technologies, digital health and medicines, and can connect you to the health innovation support & funding landscape across the UK. Connecting with KTN can lead to potential collaborations, horizon-expanding events, bespoke support and innovation insights relevant to your needs.

ktn-uk.co.uk
Lancashire Enterprise Partnership works closely with the three universities in Lancashire which form the core of the health innovation eco-system alongside the AHSN and local health Trusts. The three main access points for research and business are:
The Health Innovation Campus (HIC) at Lancaster University, which provides the physical space to support researchers, healthcare providers, businesses, local authorities and policy makers in working together to overcome significant health challenges. The Faculty of Health & Wellbeing at UCLan, that works with two clinical trials units with a focus on complex trials in population and public health, cancer, musculoskeletal health and stroke. There are also strong links to the Faculty of Science & Engineering in developing product solutions. The PGM Institute at Edge Hill University, part of Edge Hill University Medical School which works with Aintree and Alder Hey Children’s Hospital. There is notable work in antibiotic discovery, Cystic Fibrosis gene therapy and skin disease. Contact the local enterprise partnership for strategic access to collaborative innovation projects.
lancashirelep.co.uk

Liverpool City Region
The Liverpool City Region LEP and Combined Authority work together to deliver the Growth Strategy for the City Region. The Combined Authority is led by Metro Mayor Steve Rotheram and brings together Liverpool City Region’s six local authorities – Halton, Knowsley, Liverpool, Sefton, St Helens and Wirral. For the City Region, the LEP provides strategic advice and guidance on economic development priorities while the Combined Authority brings democratic accountability and oversight. Working together in this way gives the region insights and benefits of both the public and private sectors. Health and Life Sciences is a key sector for the region, with the LEP, Local Authorities, the Combined Authority, companies, NHS and universities making significant investments and supporting wider developments over recent years. Key commercial strengths of the region include biopharmaceutical manufacturing, infectious diseases and medtech/digital health.
localgrowthhub.com
Liverpool Health Partners

Liverpool Health Partners (LHP) is a vehicle for collaboration between NHS Trusts and Higher Educational Institutes in the Liverpool City Region (LCR). LHP brings together the capabilities of its partners to provide an industry-leading platform for healthcare research and education. Through this, LHP looks to improve economic productivity and population health outcomes.

A crucial development for the City Region is the Joint Research Service (JRS) which goes live April 2019 and co-ordinates Research and Development teams from the whole of LHP to work closely together, providing a service of excellence to investigators and sponsors of clinical research.

The JRS aims to provide a responsive, flexible and professional research support service that will reduce duplication and fragmentation in the way that clinical research is delivered, streamlining the pathway and quickening the pace of delivery. It represents a united vision for LHP to provide connected, integrated and effective resources for collaborative healthcare research.

liverpoolhealthpartners.org.uk

Medilink

Medilink is a ‘not for profit’, membership based, professional association and specialist consultancy for the Life Science sector. It brings together on a regional basis the NHS, industry and academia to drive innovation and improve patient care. Its primary focus is on fast tracking the development of Life Science companies (medical devices, diagnostics, drug delivery and digital health) through enhancing their connectivity (regionally, nationally and internationally) and through the provision of specialist resource, spanning ‘Innovation and Commercialisation’, ‘PR & Communications’ and ‘International’.

Medilink North of England forms part of the Medilink UK network which is now the largest representative body for the UK Medical Technology industry; this provide members with national reach in addition to regional connectivity. Medilink is also an accredited partner for the Department of International Trade and in this capacity organises and manages UK pavilions and trade missions to major life science shows across the world.

medilink.co.uk

"Connecting with the NW HealthTec cluster is possibly the most important thing SME’s can do in their commercialisation journey. The true benefit of representation, platform, introductions and advice collectively, and from stakeholders such as STFC, Innovation Agency, Health Innovation Exchange and KTN has been incalculable.

Phil Blything
CEO, Glow Media"
The National Institute for Health and Care Excellence (NICE) is known internationally for the scientific rigour of its approach to evaluating the effectiveness and value of medicines, medical technologies and clinical interventions. There are several opportunities to engage with NICE at all stages of health technology development which aim to help innovators deliver better and measurable outcomes. The NICE Office of Market Access (OMA) helps companies to engage with NICE and key stakeholders across the NHS to gain valuable insights to inform their market access strategy. Companies can engage at any stage in the product development lifecycle. Areas for discussion could include identifying the most appropriate route to patient access, understanding the impact of the changing landscape, understanding how disruptive innovations may be managed into the system, and exploring barriers to uptake. The broad exploratory nature of the discussions facilitated by OMA provide useful context for further product development plans. The NICE Scientific Advice team helps developers of pharmaceuticals, devices, diagnostics and digital health technologies. Companies can discuss and ask questions about their clinical development and health economic modelling plans. The advice is then used to help ensure that the evidence they produce is adequate to support a future reimbursement submission. As part of this process, patient representatives, clinicians, and health economic experts can be invited to contribute to the in-depth discussions.

nice.org.uk/about/what-we-do/life-sciences

The National Institute for Health Research (NIHR) is the nation’s largest funder of health and care research. The NIHR:

• Funds, supports and delivers high quality research that benefits the NHS, public health and social care
• Engages and involves patients, carers and the public in order to improve the reach, quality and impact of research
• Attracts, trains and supports the best researchers to tackle the complex health and care challenges of the future
• Invests in world-class infrastructure and a skilled delivery workforce to translate discoveries into improved treatments and services
• Partners with other public funders, charities and industry to maximise the value of research to patients and the economy

The NIHR offers a range of support service to the life sciences industry including:

• Access to expertise, facilities and data
• Research funding
• Support to deliver studies in the UK’s health and care system

To find out how the NIHR can support your company, contact nocri@nihr.ac.uk nihr.ac.uk
Northern Health Science Alliance

The Northern Health Science Alliance (NHSA) is a front door to the North of England’s health research system, working together for a healthier, wealthier region. As a partnership established by the leading universities, NHS Hospital Trusts and Academic Health Science Networks in the North of England, the NHSA provides a portal to its internationally recognised health science excellence. We work across a population of 15 million bringing together research, health science innovation and commercialisation. The NHSA works directly with commercial partners to provide access to researchers, universities, hospitals and leading health research institutions. The NHSA is a focal point for our members and partner organisations to work collaboratively on projects that leverage the combined potential of the North. Our members, work as one to harness the resources, infrastructure, intellectual capital and experience of the whole ecosystem. 
thenhsa.co.uk

National Physical Laboratory (NPL)

As the UK’s National Measurement Institute, NPL plays a leading role in maintaining the UK’s position as a world leader in translating life sciences research, accelerating access to new diagnosis and treatment techniques, helping support rapid adoption of advanced healthcare technologies across the country. Working closely with organisations like the NHS, setting standards for lifesaving radiotherapy treatment. We help tackle some of the world’s biggest health challenges, from reducing attrition rates in drug discovery and development, to treating cancer and dementia, creating new antibiotics and helping develop new medical devices.

NPL conducts high-quality measurement science and provides products and services enabling businesses and public organisations to make reliable measurements and have confidence in the decisions they make based on the results. NPL helps SME’s with: • Testing and validation of technologies • Safety assessment • Quality assurance and product development • Access to state of the art analytical and imaging techniques • Training npl.co.uk
North West Cancer Research (NWCR)

We are the leading independent cancer research charity in North West England and North Wales. We place a strong focus on the forms of cancer which have the biggest impact on the people of our region, particularly around early diagnosis, improved therapies and understanding the inequalities which lead to a higher prevalence of cancers in this area. North West Cancer Research is interested in partnering on projects focussed on improving our understanding of, ability to diagnose, and treat, cancer. We bring 70-years of experience, connections into local universities, bodies, healthcare companies and researchers, and an ability to fund research. By collaborating we believe we can make a difference to the lives of people living across our region, reducing the impact of cancer on the North West and North Wales. We would also be interested in working with organisations wanting to support our charitable aims. nwcr.org/our-work

Royal College of Physicians

The Royal College of Physicians (RCP) is a professional membership body for physicians, with over 36,000 members and fellows around the globe working in hospitals and communities across 30 medical specialties. Everything that we do at the RCP aims to improve patient care and reduce illness. Our work is patient centred and clinically led; we drive improvement in the diagnosis of disease, the care of individual patients and the health of the whole population, both in the UK and across the globe. We also work to ensure that physicians are educated and trained to provide high-quality care.

Our new building in Liverpool, The Spine, will attract high-quality healthcare professionals and drive quality improvement in a pioneering atmosphere of collaboration and partnership. The RCP’s ambitions for having a second main base outside London are:

- to be a beacon of academic excellence and medical leadership, connecting more closely with our communities in the north
- to lead the improvement of patient care and public health
- to be a world-class learning and assessment centre
- to drive quality improvement and implementation science.

The Spine has a key location in Paddington Village, part of KQ (Knowledge Quarter) Liverpool. It will be at the heart of a medical and scientific precinct, with close neighbours focused on providing healthcare, including the new Royal Liverpool Hospital and the Clatterbridge Cancer Centre. The Spine has been made possible by a strong and generous partnership between the RCP and Liverpool City Council. rcplondon.ac.uk
RTC North is an innovation management company whose mission is to help clients to innovate, compete and grow. Specialising in the commercialisation of new products and services, we work with individuals, businesses and the public sector to help create more innovative and vibrant economies. We have vast experience of helping organisations with all stages of the innovation and IP commercialisation process and currently use this expertise to support partners at a UK regional, national and European level.

RTC North is also a lead UK partner in the world’s largest business support network - Enterprise Europe Network - and has established relationships with partners in Asia as well as North and South America.

rtcnorth.co.uk
SuperSTEM

SuperSTEM, the EPSRC National Research Facility for Advanced Electron Microscopy, is an internationally-renowned user facility that acts as a focal point for driving forward developments in scanning transmission electron microscopy (STEM). The facility provides world-leading capabilities for the direct imaging of atomic structures, the determination of elemental composition along with chemical and bonding analysis, in thin samples down to single atom precision. As such it supports the elucidation of structure-property relationships in advanced materials and devices in the broadest sense, embracing structural and functional materials research, the geosciences and the biosciences. The facility’s electron microscopes are optimised for studies requiring single-atom precision and sensitivity and have the specificity of operating at low to medium primary beam energies (40-100keV). This is a highly sought after and specialised capability, deployed to minimise electron beam knock-on damage, which can hamper the study of a wide variety of materials.

superstem.org

The North West Coast Strategic Clinical Networks

The North West Coast Strategic Clinical Networks (SCNs) are strategic drivers of improvement, innovation and change in healthcare across Cheshire, Merseyside, Lancashire and South Cumbria. Their work is centred around improving and innovating health services to achieve better patient outcomes and reduce unwarranted variation in quality of care and services.

Hosted by NHS England, the networks provide in-depth, high quality clinical leadership and advice to inform health and social care commissioning decisions. They work in partnership with the ‘Healthier Lancashire and South Cumbria’ Integrated Care System and the Cheshire and Merseyside Health and Care Partnership to redesign and transform services and drive large scale change at pace and across complex pathways. They do this in priority areas of health and care which include diabetes, mental health and dementia, stroke, maternity and perinatal mental health, and palliative and end of life care.

The SCNs have also established quality and governance assurance measures in order to monitor progress and results of publicly-funded health programmes in the North West Coast including the National Diabetes Prevention Programme, Suicide Prevention and Local Maternity System Transformation Plans.

england.nhs.uk/north/north-west-coast-strategic-clinical-networks
The North West Clinical Senates

The North West Clinical Senates provide independent strategic clinical advice and guidance to health and care commissioners. Their work ensures future clinical configurations of services are based on the considered views of clinicians and in the best interest of patients. Organisationally agnostic, they are able to take a broader strategic view on the totality of healthcare in a particular geographical area. In the North West there are two clinical senates: Cheshire and Merseyside; and Greater Manchester, Lancashire and South Cumbria. Their membership spans health and care professions and includes representatives of patients, volunteers and other groups.

nwcscn senate.nhs.uk

“Nothing is more important than our health, so it makes sense that this should be the focus of our ingenuity, our enterprise and most importantly our imagination. Looking around us today the changes and advancements are driven by technology, and it is in technology that the greatest potential for improving our health lies. It is therefore hugely frustrating to see the many outdated pieces of technology we use day to day in the NHS, when the potential is so much more.

Healthcare is a difficult environment to push technological change, which is why we need to work harder and create initiatives like this to break through and harness the mind blowing capabilities of modern technology. From non-invasive sensors, to artificial intelligence, nano materials and beyond. I look forward to seeing what the minds that this programme attracts can achieve for the future health of the United Kingdom.

Iain Hennessey
Clinical Director of Innovation, Alder Hey Children’s Hospital
Common Language: Acronyms

AHRC – Arts and Humanities Research Council
AHSC – Academic Health Science Centre
AHSN – Academic Health Science Network (15 in England)
API (Digital) - Application programming interface
BBSRC – Biotechnology and Biological Sciences Research Council
BIC – Business Incubation Centre
CCG – Clinical Commissioning Group
CDS - Commissioning Data Sets
CLAHRC - NIHR Collaborations for Leadership in Applied Health Research and Care
CQC - Care Quality Commission
CRN – Clinical Research Network
CRO – Contract Research Organisation
DIT – Department for International Trade
EEN – Enterprise Europe Network
EHR – Electronic Health Record
EPSRC – Engineering and Physical Sciences Research Council
ESA – European Space Agency
FIHR -Fast Healthcare Interoperability Resources
GDE (Trust) – Global Digital Exemplars
GDPR - General Data Protection Regulation
HDR – Health Data Research UK
HPC – High Performance Computing
HRA – Health Research Authority
IAPT – Improving Access to Psychological Therapies
ICS - Integrated Care System
ICU – Intensive Care Unit
KTN – Knowledge Transfer Network
KTP – Knowledge Transfer Partnership
LEP – Local Enterprise Partnerships
LHCRE – Local Health Care Record Exemplars
MHRA – Medicines Health Regulatory Authority
MRC – Medical Research Council
NHSD – National Health Service Digital
NHSE – National Health Service England
NSHI – National Health Service Improvement
NHST – National Health Service X
NICE – National Institute for Health and Care Excellence
NIHR – National Institute of Health Research
NIHR MICs – NIHR Medtech and In vitro diagnostics Co-operatives
NOCRI – NIHR Office for Clinical Research Infrastructure
PACS - Picture archiving and communication system
PAS - Patient Administration Systems
PHE – Public Health England
RE – Research England
ROI – Return on Investment
SQE - Safety, Quality, Experience
STFC – Science and Technology Facilities Council
STP - (health finance) – Sustainability and transformation payments
STP – Sustainability and Transformation Partnership
UKRI – UK Research and Innovation
The cluster is here to help you better understand how you could benefit from these stakeholders and to help signpost you to the people behind them. For more information please contact the following:

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